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10/667,602	09/23/2003	Chang-Seob Kim	61610096US	9753

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VIENNA, VA 22182

EXAMINER
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ALEJANDRO, RAYMOND

ART UNIT	PAPER NUMBER
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1795

NOTIFICATION DATE	DELIVERY MODE
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02/27/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/667,602	<b>Applicant(s)</b> KIM, CHANG-SEOB	
	<b>Examiner</b> Raymond Alejandro	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01/10/08.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-22 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 and 10-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION***

***Response to Amendment***

This action is responsive to the amendment filed on 01/10/08. The rejections under section 103 have not yet been overcome by the applicant. Refer to foregoing amendment for more information concerning applicant's rebuttal arguments and remarks. Therefore, the present claims are finally rejected over the same art as shown infra the written record:

***Election/Restrictions***

1. Claims 4-6 and 10-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 04/05/06.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

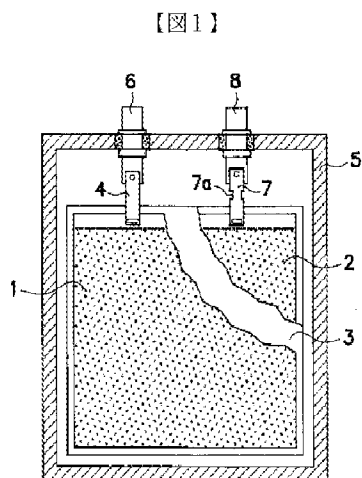
4. Claims 1, 3 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese publication 10-214614 (herein called the JP'614).

The present claims are directed to an electrode assembly wherein the disclosed inventive concept comprises the specific current interrupter.

As to claim 1:

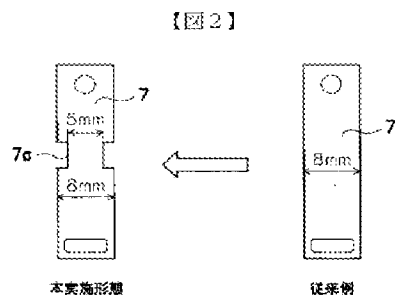
The JP'614 discloses an electrode assembly comprising a positive electrode 1 and a positive electrode lead 4; a negative electrode 2 and a negative electrode lead 7 (P. 0002/ CLAIM 1/FIGURE 1). The electrode assembly is a laminated (stacked) and wound assembly (P. 0011).

**Figure 1** below illustrates the specific configuration of the electrode assembly:

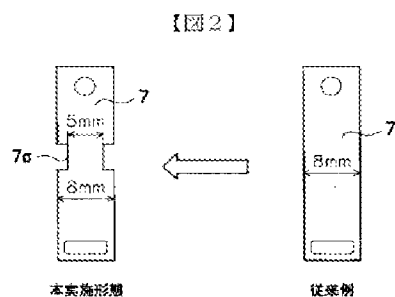


A constricted portion 7a is made at the center between an upper and lower side of the negative electrode lead 7 (ABSTRACT). Accordingly, as for the negative electrode, the constricted portion 7a sets a current limit (ABSTRACT/ P. 0014-16).

Figure 2 below also illustrate constricted portion 7a having at least a curved portion forming a substantially right angle on the negative electrode lead 7.



As shown in **Figure 2**, section 7a has a smaller cross-sectional area than a cross-sectional area of the negative electrode lead (See Figure 2). *As can be appreciated from the illustration of Figure 2 below, the cross-sectional area of the constricted portion 7a is smaller than the cross-sectional area of the adjacent portions.*



As to claim 3:

It is apparent from **Figure 2** above that section 7a forms a notch and/or an indentation and/or an angular cut in the edge (See Figure 2).

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As to claim 7:

At least, the cross sectional area near section 7a can be represented by 5 mm x L, while the cross sectional area of the negative electrode can be represented by 8mm x L (See Figure 2).

*Thus, the cross sectional area near section 7a is about 0.625 times that of the cross sectional area of the negative electrode.*

As to claim 8:

The negative electrode lead is made of copper (P. 0014).

The JP'614 discusses an electrode assembly as discussed above. Nevertheless, the preceding prior art reference fails to expressly disclose the specific curved portion out of plane from a planar section.

In view of the above, it would have been obvious to a person possessing a level of ordinary skill in the pertinent art at the time the invention was made to make the electrode lead of the JP'614 by having the specific curved portion out of plane from a planar section because it is noted changes in shape is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed electrode lead is significant or critical. *In re Dailey*, 149 USPQ 47. It is also noted that aesthetic design changes having no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 73 USPQ 431. (See MPEP 2144.04 [R-1] Legal Precedent as Source of Supporting Rationale).

5. (At least) Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over the publication CN 247355 (herein called the CN'355).

The CN'355 discloses an electrode assembly comprising a positive plate, and a negative plate welded to respective electrical terminals (*electrode leads electrically connected to the positive/negative plates*) and being separated by a separating plate wherein the plates are stacked and wound (ABSTRACT/CLAIMS 1-9/ Page 1, lines 4-15). Reference numeral 3 represents a current interrupter adapted to interrupt current or break electric circuit when there is an increased in current (ABSTRACT/FIGURE 1). **Figure 1** illustrates section 3 having a cross-sectional area smaller than the cross-sectional areas of adjacent sections (FIGURE 1).

**Examiner's note:** *the preamble limitation "for a lithium ion cell" refers only to ultimate intended utility. The present claims are merely directed to an electrode assembly per se.*

The CN'355 shows an electrode assembly as discussed above. Nevertheless, the preceding prior art reference fails to expressly disclose the specific curved portion out of plane from a planar section.

In view of the above, it would have been obvious to a person possessing a level of ordinary skill in the pertinent art at the time the invention was made to make the electrode lead of the CN'355 by having the specific curved portion out of plane from a planar section because it is noted changes in shape is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed electrode lead is significant or critical. *In re Dailey*, 149 USPQ 47. It is also noted that aesthetic design changes having no mechanical function cannot be relied upon to patentably distinguish

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the claimed invention from the prior art. *In re Seid*, 73 USPQ 431. (See MPEP 2144.04 [R-1])

**Legal Precedent as Source of Supporting Rationale)**

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over: a) the Japanese publication 10-214614 (herein called the JP'614) and/or b) the publication CN 247355 (herein called the CN'355) as applied to claim 1 above, and further in view of Arai et al 2005/0171383.

The JP'614 is applied, argued and incorporated for the reasons expressed above.

However, the preceding prior art does not expressly disclose the negative electrode lead made of nickel.

Arai et al disclose a battery comprising an electrode assembly including a negative electrode and a positive electrode (P. 0081-0083); wherein the negative electrode lead is made of nickel (P. 0083).

In view of the above, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the negative electrode lead made of nickel of Arai et al in the electrode assembly of the JP'614 because nickel is a suitable conducting metal material. Thus, the use of a nickel negative electrode lead allows to maintain good electrical conductivity within the electrode assembly.

***Response to Arguments***

7. Applicant's arguments filed 01/10/08 have been fully considered but the Examiner remains unpersuaded. Additionally, applicant's declaration under 37 CFR 1.132 filed on 09/05/07 was further considered and examined.



8. Applicant's arguments are a substantial replicate of the arguments advanced in the response dated 09/05/07. As noted by the applicant, "*Applicant respectfully traverses these rejections for at least the reasons asserted in the Reply filed on September 05, 2007, which reasons are reasserted below*" (See 01/10/08 amendment, page 7, last sentence). In reply, the examiner reiterates the responses to argument provided in the prior office action dated 10/12/07.

Additionally, it has been noted that applicant is contending the applicability and merits of *In re DeBlauwe*. In response, the examiner makes no comment about the specifics of *In re DeBlauwe* because it is settled law. In any event, applicant should direct those comments to the organization responsible for making such a decision (i.e. the Federal Circuit court). The intention of the examiner was to set the record straight about the importance of submitting objective, scientific or sound evidence for evaluating the merits of a case.

Accordingly, the examiner intended to assert that it is not enough that applicant or applicant's representative personally believes that the prior art *does not perform or teach the specific mechanical advantages of having a curved portion*. That is to say, the arguments of counsel or the applicant cannot take the place of evidence in the record. An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of inherent anticipation/obviousness (See ***MPEP 716.01 and 2145: Consideration of Applicant's Rebuttal Arguments***).

It has been the Examiner's position that the prior art of record is capable of exhibiting those mechanical characteristics at bent/stressed portions of the negative electrode lead. Concerning this matter, it is well to note that the curved portion of applicant's invention is structurally UNDEFINED, and any bent/stressed or curved portion in the battery electrode

assembly of the cited art is CAPABLE of showing the same mechanical characteristics. Thus, the examiner remains unconvinced.

9. Applicant has stated that *“the arrangement of the current interrupted in the curved portion of the negative electrode lead offers mechanical advantages over the cited references. Such mechanical advantages are described in the Declaration...Applicant declares that ‘in the case of over-current, the arrangement of the reduced cross-section current interrupter 36a in the higher-stress curved portion of the negative electrode lead 36 would best ensure a disconnection at the current interrupted 36a’ ....and that mechanical weakening of the current interrupter due to the generated heat causes the current interrupter to break or disconnect from the negative electrode lead quickly to avoid an explosion from thermal runaway’ (See applicant’s amendment and declaration dated 09/05/07) ”.*

In reply, the examiner simply contends that TO BE OF PROBATIVE VALUE, ANY OBJECTIVE EVIDENCE SHOULD BE SUPPORTED BY ACTUAL PROOF (*See MPEP 716.01(c) Probative Value of Objective Evidence*). Objective evidence which must be factually supported by an appropriate affidavit or declaration to be of probative value includes evidence of unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art. See, for example, *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984) and *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972); *Ex parte George*, 21 USPQ2d 1058 (Bd. Pat. App. & Inter. 1991).

Furthermore, evidence of unexpected results must be weighed against evidence supporting prima facie obviousness in making a final determination of the obviousness of the claimed invention. *In re May*, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978) (*See MPEP*

**716.02(c) Weighing Evidence of Expected and Unexpected Results**). To that end, “*Expected beneficial results are evidence of obviousness of a claimed invention, just as unexpected results are evidence of unobviousness thereof.*” *In re Gershon*, 372 F.2d 535, 538, 152 USPQ 602, 604 (CCPA 1967).

Presently, to contend the prima-facie case of obviousness set forth by the Examiner based upon prior legal decisions establishing that the shape of a product is unpatentable (in the absence of objective evidence showing that such a shape or configuration is significant or critical), applicant has now provided a declaration to advance the foregoing including the following statement: “*the arrangement of the current interrupter in the curved portion of the negative electrode lead offers mechanical advantages over the cited references*” and has further pointed out that such a particular shape has the advantage of “*creating a spring effect and to ensure electrical contact between the negative electrode lead 36 and the negative electrode terminal because the stress is greater in the curved portion than in the planar portion of the negative electrode lead 36 due to a P-delta effect that results from a deflection caused by axial loading*” and “*would best ensure a disconnection at the current interrupter in the event of increased resistance*”. Having carefully analyzed the weight of the body of evidence, the Examiner is still of the view that applicant’s statement are not sufficient to overcome the prior art of record when taken together with the settled law. The Examiner remains of the opinion that the apparent mechanical advantages mentioned above by the Applicant are **completely expectable** when a change in shape or configuration does occur. The fact that stress is greater at the curved portion instead of the other parts of the negative electrode lead is something that necessarily occurs therein because a force or pressure is being applied to that specific location (i.e. the curved

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portion). Thus, whatever final result the stressed (curved) portion has on the functionality of the electrode assembly, or ultimately the battery, is something directly associated with the force exerted on that portion. As such, other than miscellaneous changes or results, there is nothing particularly significant or critical associated with the change in shape so as to convey a clear idea that the re-shaping of the negative electrode lead produces significant advantages or unexpected results. Thus, the Examiner reasonably believes that applicant's change in shape (the claimed curved portion) does not add to the novelty of the invention in question to the point of affirming critical mechanical advantages other than the ones fully expectable to the concentration of energy (pressure or force) on the curved portion.

The evidence relied upon should establish “*that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance.*” Ex parte Gelles, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992) (Mere conclusions in appellants' brief that the claimed polymer had an unexpectedly increased impact strength “are not entitled to the weight of conclusions accompanying the evidence, either in the specification or in a declaration.”); Ex parte C, 27 USPQ2d 1492 (Bd. Pat. App. & Inter. 1992) (Applicant alleged unexpected results with regard to the claimed soybean plant, however there was no basis for judging the practical significance of data with regard to maturity date, flowering date, flower color, or height of the plant.). See also In re Nolan, 553 F.2d 1261, 1267, 193 USPQ 641, 645 (CCPA 1977) and In re Eli Lilly, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) as discussed in MPEP § 716.02(c).

Finally, an affidavit or declaration under 37 CFR 1.132 must compare the claimed subject

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matter with the closest prior art to be effective to rebut a prima facie case of obviousness. In re Burckel, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979); In re Merchant, 575 F.2d 865, 868, 197 USPQ 785, 787 (CCPA 1978); In re Finley, 174 F.2d 130, 81 USPQ 383 (CCPA 1949); & In re Armstrong, 280 F.2d 132, 126 USPQ 281 (CCPA 1960).

***MPEP 2144 2144.04 [R-1] Legal Precedent as Source of Supporting Rationale***

establishes the following: *As discussed in MPEP § 2144, if the facts in a prior legal decision are sufficiently similar to those in an application under examination, the examiner may use the rationale used by the court. Examples directed to various common practices which the court has held normally require only ordinary skill in the art and hence are considered routine expedients. If the applicant has demonstrated the criticality of a specific limitation, it would not be appropriate to rely solely on case law as the rationale to support an obviousness rejection.* As of the issuance of this final rejection, applicant has not asserted or demonstrated a crystal clear criticality for the claimed modification other than commenting that “*the arrangement of the current interrupter in the curved portion of the negative electrode lead offers mechanical advantages over the cited references*”.

However, in a first aspect, as mentioned above, it would be completely expectable to achieve the level of disconnection in the event of increased resistance because when the change in shape takes place at the portion of the negative electrode lead to form the claimed curved portion the application of force or pressure increases the stress level at that specific portion (i.e. the curved portion). Thus, the disconnection advantage is not so significant as it is directly related to the applied force or pressure. It is kind of an expectable effect-result scenario.

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Pressure or force affects the negative electrode lead, and it produces the result of concentrating stress at a particular location.

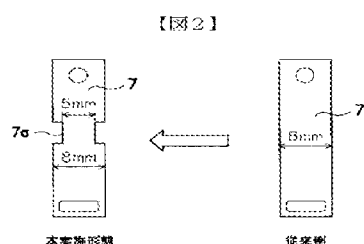
***MPEP 716.02(c) [R-2] Weighing Evidence of Expected and Unexpected Result*** sets forth the following:

- *The evidence relied upon should establish “that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance.” Ex parte Gelles, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992) (Mere conclusions in appellants’ brief that the claimed polymer had an unexpectedly increased impact strength “are not entitled to the weight of conclusions accompanying the evidence, either in the specification or in a declaration.”); Ex parte C, 27 USPQ2d 1492 (Bd. Pat. App. & Inter. 1992) (Applicant alleged unexpected results with regard to the claimed soybean plant, however there was no basis for judging the practical significance of data with regard to maturity date, flowering date, flower color, or height of the plant.). See also In re Nolan, 553 F.2d 1261, 1267, 193 USPQ 641, 645 (CCPA 1977) and In re Eli Lilly, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) as discussed in MPEP §716.02(c).*
- *“Expected beneficial results are evidence of obviousness of a claimed invention, just as unexpected results are evidence of unobviousness thereof.” In re Gershon, 372 F.2d 535, 538, 152 USPQ 602, 604 (CCPA 1967) (resultant decrease of dental enamel solubility accomplished by adding an acidic buffering agent to a fluoride containing dentifrice was expected based on the teaching of the prior art); Ex parte Blanc, 13 USPQ2d 1383 (Bd. Pat. App. & Inter. 1989) (Claims at issue were directed to a process of sterilizing a polyolefinic composition which contains an antioxidant with high-energy radiation. Although evidence was presented in appellant’s specification showing that particular antioxidants are effective, the Board concluded that these beneficial results would have been expected because one of the references taught a claimed antioxidant is very efficient and provides better results compared with other prior art antioxidants.).*

*The following responses to applicant’s arguments are maintained herein for the reasons of record as they also address certain arguments or declarations advanced by the applicant.*

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10. Applicant has now advanced the argument that the newly added limitation “*the current collector is arranged in a curved portion of the negative electrode lead*” is neither disclosed nor taught by the prior art reference. The examiner respectfully traverse this argument. For instance, Figure 2 below illustrates constricted portion 7a having at least a curved portion forming a substantially right angle on the negative electrode lead 7.



In advancing this argument, applicant appears to be equating the projecting portion of his electrode lead or the non-planar configuration of his electrode lead to the limitation “*a curved portion*” of the electrode lead. While applicant’s projecting portion or non-planar configuration maybe representative of a curved portion, such a curved portion is not limited only to applicant’s configuration. To assist in determining whether this is right or not, the examiner went to the Merriam-Webster’s Collegiate Dictionary 10<sup>th</sup> Edition for a definition of the term “curve” and found that “curve” is defined as “bent or formed into a curve”, or “to have or take a turn, change or deviation from a straight line or plane surface”. Therefore, it is believed that constricted portion 7a of the negative electrode 7 of the prior art is either bent or formed into a curve or at least has or takes a turn, change or deviation from a straight line. Therefore, the prior art still anticipates the presently claimed invention.

11. The gist of applicant’s arguments against the JP’614 reference is based on the assertion that “claim 1 recites, inter alia, an electrode assembly for a lithium ion cell...Specifically, Inoue

(the JP'614) fails to teach application of Inoue's invention to a lithium ion cell". However, this assertion is insufficient to overcome the preceding rejection. In response to applicant's arguments, the recitation "for a lithium ion cell" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) & *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

12. In response to applicant's argument that his invention is "*an electrode assembly for a lithium ion cell*", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

13. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. (*Emphasis*



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**supplied→)** Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). *In this case, the motivation provided by the examiner is based on the fact that nickel is a conducting metal material which has been recognized in the field of applicant's endeavor as a suitable material for purposes of constructing electrode structures or variants thereof. As a result, those of ordinary skill in the art would find that by using nickel as part of any electrode structure good electrical conductivity within the electrode assembly is achieved.*

14. In response to applicant's argument that “*While the Office Action asserts that nickel may be substituted as an electrode lead, the more important question is whether there is suggestion to substitute nickel for Inoue's constricted portion 7a in the dimensions disclosed by Inoue, and whether nickel would be suitable to perform the function of Inoue's constricted portion...*”, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). *The combination of the JP'614 reference with Arai et al'383 is a solid combination for the reasons expressed supra. In consequence, such a combination represents a concrete prima-facie case of obviousness not only for addressing and showing all the claimed limitations but also for providing specific guidance to recognize that nickel can be used as an electrode lead. This provides sufficient specificity to arrive at the conclusion that nickel is a suitable material being used for making electrode leads for the benefits of enhancing conducting characteristics.*

***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282. The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raymond Alejandro/  
Primary Examiner, Art Unit 1795